IPO ANALYSIS

Research on potential upcoming IPOs from selected candidate companies.

Snap

Hamilton Lane

Bitcoin Investment Trust

Visterra

Braeburn Pharmaceuticals

December, 2016

VentureDeal

Snap Files S-1 Registration For \$3 Billion IPO

Quick Take

Camera company <u>Snap Inc.</u> (Pending:<u>SNAP</u>) has filed its <u>initial S-1</u> <u>registration</u> for a \$3 billion IPO at an undisclosed valuation. Snap views the camera as the primary use of the mobile device and seeks to monetize its user base primarily through advertising.

The company has a short history of rapidly growing revenues, which exceeded \$400 million in 2016.

Company

Venice-based Snap was founded in 2012 by current CEO Evan Spiegel and current CTO Robert Murphy to initially provide users with a smartphone app that enabled them to post pictures that were automatically deleted after a brief time period.

The company has since expanded its scope to include chat, video, media that does not become automatically deleted, and a camera integrated into sunglasses.

Below is a brief company video on its recently introduced Spectacles product:

(Source: <u>Snap YouTube</u>)

Snap has raised in excess of \$2.6 billion in several private financing rounds from numerous investors including top tier venture capital firms, corporate investors, private equity firms and government-owned investment enterprises.

The company claims that 158 million people use its flagship Snapchat each day, creating over 2.5 billion 'Snaps'.

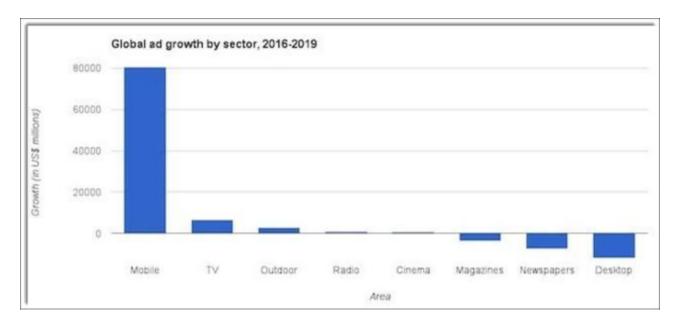
Market and Competition

Snap operates a largely advertising-driven business model, although it does sell its Spectacles product for \$129 each. It seeks to provide advertisers with access to its user base, which has typically centered around a younger demographic, between the ages of 14-30.

The company has developed a number of advertiser tools and APIs (Application Programming Interfaces) that enable them. In many respects, Snap competes with other mobile-oriented social networks such as Facebook (NASDAQ:FB), Twitter (NYSE:TWTR), and to a lesser extent, Google (NASDAQ:GOOG) (NASDAQ:GOOGL).

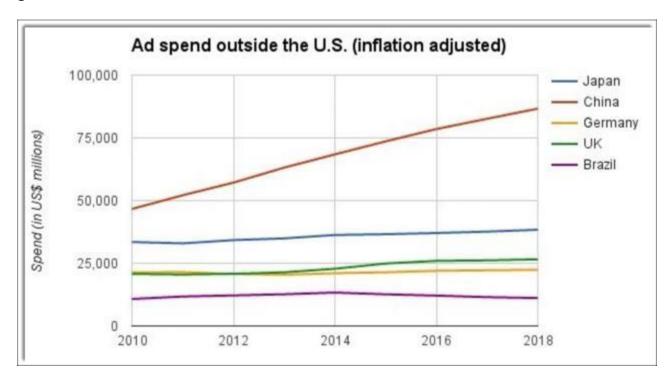
The market size for Snap's service is dependent on the size of its network of users, their frequency of use of the various services and features, and advertisers' ability to achieve their ROI goals. Global advertising is expected to reach \$767 billion in 2020, according to Snap.

But ad growth by sector is more interesting, showing mobile ads should account for virtually all ad growth through 2019:



(Source: <u>DigiDay</u>/Zenith)

Snap says it is also focused on the countries where most of the ad spend growth will occur:



(Source: DigiDay/Zenith)

So, the company is well-positioned to take full advantage of the trend toward mobile advertising worldwide.

Financials

Snap's recent financial results can be summarized as follows:

- Revenues are growing dramatically.
- Gross margin is negative.
- Significant cash flow used in operations.

Below are the company's operational results for the past two years (Audited GAAP):

		Year I Decem		
	0	2015	222	2016
Revenue	\$	58,663	\$ 4	04,482
Costs and expenses:				
Cost of revenue		182,341	4	51,660
Research and development		82,235	1	83,676
Sales and marketing		27,216	1	24,371
General and administrative	8	148,600	_1	65,160
Total costs and expenses		440,392	9	24,867
Loss from operations	(381,729)	(5	20,385
Interest income		1,399		4,654
Interest expense		-		(1,424)
Other income (expense), net	- 00	(152)	151	(4,568
Loss before income taxes	(380,482)		(521,723)	
Income tax benefit (expense)		7,589		7,080
Net loss	\$(372,893)		\$(514,643	
Net loss per share attributable to Class A and Class B common stockholders and Series D, E, F, and FP preferred stockholders (Note 15):			**	
Basic	\$	(0.51)	\$	(0.64
Diluted	\$	(0.51)	\$	(0.64
Pro forma net loss per share attributable to Class A, Class B, and Class C common stockholders (Note 15):		7.1	20	
Basic			\$	(0.53
Diluted			S	(0.53

(Source: Snap S-1)

Revenue

2016: \$405 million2015: \$58.7 million

Gross Margin

2016: Negative2015: Negative

Cash Flow from Operations

2016: \$307 million cash used2015: \$611 million cash used

As of December 31, 2016, the company had \$641 million in cash on hand and \$175 million in total liabilities, with no long-term debt.

IPO Details

Snap intends to raise \$3 billion in its IPO, selling Class A shares at an as-yet undisclosed price.

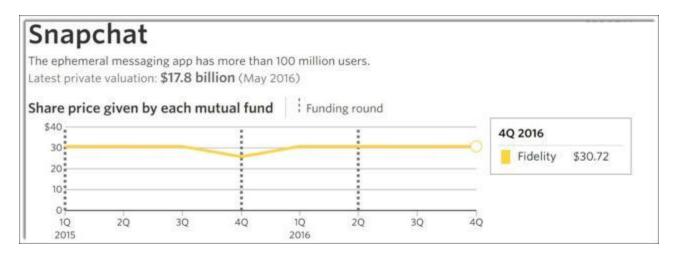
The company intends to use the proceeds for 'general corporate purposes', Management also intends to retain firm control of the company through Class B shares, which is a common approach.

In this case, public investors are 'just along for the ride' and should be well aware of the concentration of control in senior management, notably the cofounders: CEO Evan Spiegel and CTO Robert Murphy who each own 21.8% of Class A stock, which will convert into Class B at IPO.

Other major investors are Benchmark Capital (12.7% Class A; 22.8% Class B) and Lightspeed Venture Partners (8.3% Class A; 15% Class B).

Commentary

As for IPO valuation, which has been the topic of much debate, the most recent private investment valuation was in Q4 of 2016 by Fidelity Management that valued the company at \$17.8 billion:



(Source: WSJ Startup Stock Tracker)

Numerous reports in the press have indicated an expected IPO valuation of \$25 billion, which would not be surprising given its recent private market valuation of nearly \$18 billion and strong revenue growth.

Management believes that the camera will become the primary interface for users in a mobile setting, just as the flashing cursor was the 'starting point' for computer users.

Snap was built from the ground up for the smartphone camera, whereas its erstwhile competitors, Facebook and Twitter, were originally built for the desktop and 'morphed' into mobile applications.

Further, an investor in Snap's IPO would need to agree substantially with its foundational thesis, that the camera will become the primary interface for mobile devices. I'm not sure I agree with that.

Cameras are indeed important for capturing memories and other information uses by consumers and businesses, so I don't mean to minimize its importance.

However, smartphones have become extremely powerful computers with a wide range of uses, and the camera is but one application out of many.

Additionally, Snap's competitors, most notably Facebook, aren't standing still.

Although Facebook, through its Instagram application, has been criticized as being a 'copycat' of some of Snap's functionality, it is pursuing a strategy of retaining users on its platform, effectively denying Snap large numbers of users on a global scale.

So, Snap will certainly continue to grow revenues and is widely expected to reach \$1 billion in top line revenues in the next 18 months, but investors will

potentially be asked to invest at a valuation that may require a much higher growth rate and terminal value.

Snap management has published a global ARPU (Average Revenue Per User) of \$1.05, and a North America ARPU of \$2.15.

This is a far cry from Facebook's worldwide ARPU, which reached \$15.98 in 4Q 2016, an increase of 34% vs. 4Q 2015. (Source: <u>Facebook 10-Q</u>)

Although it's early days for Snap and its ability to monetize its user base, it has a very long way to go before it competes with Facebook.

Even generously using Facebook's current **13.7x** Price/Sales multiple, for Snap's trailing 12-month revenues of \$405 million would indicate a valuation of \$5.5 billion; assuming forward revenues of \$1 billion would indicate a valuation of \$13.7 billion.

So, if Snap offers shares at a \$25 billion valuation, investors would need to accept a near-term Price/Sales multiple in the range of **25x-35x**.

That's a very tall order and one predicated on buying into their vision of the camera as the central focus of mobile computing and their ability to compete effectively with Facebook.

When Snap discloses their proposed share price range and valuation, probably within the next 30 days, I'll provide an update.

Hamilton Lane Seeks \$200 Million In New IPO Filing

Quick Take

Private market investment firm <u>Hamilton Lane</u> (Pending:<u>HLNE</u>) has filed an <u>initial S-1 registration</u>. The company has largely consistent top line revenue growth and positive net income as investor appetite for investment in privately-held companies and vehicles has grown in recent years.

Company

Bala Cynwyd, Pennsylvania-based Hamilton Lane was founded in 1991 and has developed service lines to enable clients to invest in a variety of private markets, including:

- Private Equity
- Private Credit
- Infrastructure
- Real Estate
- Venture Capital
- Growth Equity
- Natural Resources

Management is headed by CEO and director Mario Giannini who has been with the firm since 1993. He previously held senior executive positions in other financial services firms.

The company has previously operated as Hamilton Lane Advisors, LLC, but has changed its entity type to a Delaware C Corporation Hamilton Lane Incorporated in preparation for the IPO.

Investors in the company who hold at least 5% of company stock include HLA Investments and HL Management Investors.

Below is a brief company video:

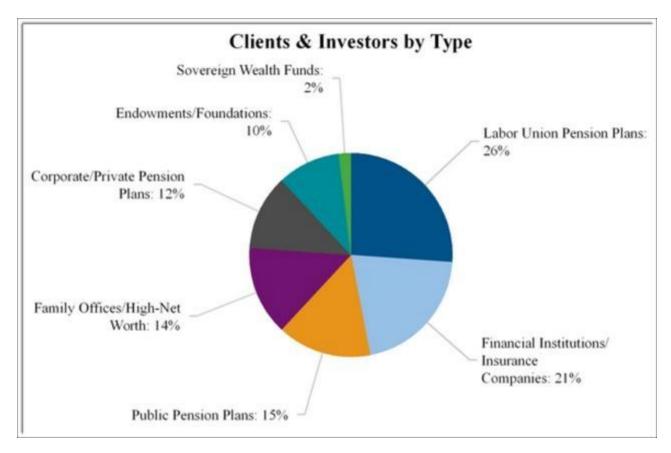
(Source: <u>Hamilton Lane YouTube</u>)

Hamilton Lane claims \$40 billion in AUM, or assets under management, and \$274 billion of assets under advisement, or AUA, deployed in over 89 countries.

It offers clients a number of different services:

- Customized Separate Accounts
- Specialized Funds
- Advisory Services
- Distribution Management
- Reporting, Monitoring, Data and Analytics

Its investor and client base included more than 350 intermediaries and institutions as of September 30, 2016, and is divided by type as follows:



(Source: <u>Hamilton Lane S-1</u>)

Market and Competition

The company operates in a globalized, multitrillion-dollar marketplace for equity and debt capital investment in private companies.

Its primary source of revenue is from customized separate accounts, and there are many other large international financial institutions that offer clients similar access to private investment opportunities, including:

- Goldman Sachs (NYSE:GS)
- Morgan Stanley (NYSE:MS)
- T. Rowe Price (NASDAQ:TROW)
- Fidelity Investments

Additionally, there are numerous smaller, regional players that provide their clients with access to selected private investment deals.

Financials

Hamilton Lane's recent financial results can be summarized as follows:

- Steadily growing revenue in the range of 10% to 17% per year.
- Positive net income of generally increasing amount, with the exception of a drop in 2016 vs. prior.

Below are the company's operational results for the past five years (Audited GAAP):

	Hamilton Lane Incorporated				Hamilton Lane Advisors, L.L.C. Consolidated Statements of Income					
	Year Ended March 31,	Six Months Ended September 30,		Year Ended March 31,						
	2016	2016	2015		2016	2015	2014	2013	2012	
Income Statement Data (in thousands)	Pro Forma	8			18	8	35 Ta			
Revenues										
Management and advisory fees	s	\$ 84,264	s	78,640	\$157,630	\$145,876	\$130,455	\$112,982	\$106,714	
Incentive fees	128	6,346	1	5,717	23,167	9,509	9,309	6,179	2,032	
Total revenues		90,810		84,357	180,797	155,385	139,764	119,161	108,746	
Expenses										
Compensation and benefits		36,422		54,283	92,065	60,157	55,950	46,789	43,312	
General, administrative and other expenses	12	14,085	3 <u>d</u>	11,891	26,898	26,865	24,760	22,210	23,756	
Total expenses		50,507		66,174	118,963	87,022	80,710	68,999	67,086	
Other income (expenses)										
Equity in income of affiliates		5,797		2,556	1,518	10,474	16,905	12,149	4,938	
Interest expense		(5,856)		(6,681)	(12,641)	(5,883)	(8,503)	(11,136)	(1,043	
Interest income		120		57	194	87	142	296	286	
Other non-operating income (loss)		10		5,884	5,816	(1,056)	(699)	(461)	283	
Total other income (expenses)		71	311	1,816	(5,113)	3,622	7,845	848	4,464	
Income before (benefit) provision for income taxes		40,374		19,999	56,721	71,985	66,899	51,010	46,142	
(Benefit) provision for income taxes		(375)		151	869	483	(128)	(827)	271	
Net income		40,749		19,848	55,852	71,502	67,027	51,837	45,871	
Less: (Loss) income attributable to non- controlling interests		960	311	(359)	(1,255)	2,242	4,565	3,157	476	
Net income attributable to HLA	\$	\$ 39,789	5	20,207	\$ 57,107	5 69,260	\$ 62,462	\$ 48,680	\$ 45,395	

(Source: <u>Hamilton Lane S-1</u>)

Revenue

• 2016: \$180.8 million, 16.3% increase vs. prior.

• 2015: \$155.4 million, 11.1% increase vs. prior.

• 2014: \$139.8 million, 17.3% increase vs. prior.

• 2013: \$119.2 million, 9.6% increase vs. prior.

• 2012: \$108.8 million

Net Income

• 2016: \$55.9 million

• 2015: \$71.5 million

2014: \$67.0 million2013: \$51.8 million2012: \$45.9 million

As of September 30, 2016, the company had \$58 million in cash on hand and total liabilities of \$311 million.

IPO Details

Hamilton Lane intends to raise \$200 million from the sale of Class A shares but has not yet provided a proposed price range for the stock, or resulting valuation.

The company will use some of the proceeds to buy membership units in Hamilton Lane Advisors, HLA, from existing owners, and the remaining net proceeds to purchase newly issued membership units in HLA so that it can pay down debt:

We intend to use a portion of the net proceeds of this offering to purchase membership units in Hamilton Lane Advisors, L.L.C. from certain of its existing owners, and the remaining net proceeds to purchase newly issued membership units in Hamilton Lane Advisors, L.L.C. We expect Hamilton Lane Advisors, L.L.C. to use these proceeds to repay indebtedness and for general corporate purposes. In connection with the reorganization transactions taking place contemporaneously with the closing of this offering, certain existing owners of Hamilton Lane Advisors, L.L.C. will exchange their membership interests for shares of our Class A common stock to be held directly and will cease to be members of Hamilton Lane Advisors, L.L.C.

The company will also issue Class B shares to 'certain members' of HLA which will have ten shares voting power for each share issued, effective retaining control of the public entity.

Commentary

The desirability of Hamilton Lane's IPO will hinge on valuation, which we don't know about yet.

The company has a consistent track record of growing revenues each year for the past five years, and its profit is growing, although less consistently than top line revenues.

The private investments industry has undergone a significant growth period, as the number of publicly-held companies shrinks.

However, going forward, if the current Federal administration and Congress work to reduce regulation on publicly-held companies, that trend could stabilize or even reverse, as companies find going public easier to do.

In that scenario, the effect on Hamilton Lane's business would be hard to gauge, as more IPOs may mean better portfolio performance as exits become more numerous, but fewer investment opportunities in private companies.

In any event, the company is a potentially attractive public entity, given its relatively consistently growing financial performance.

Bitcoin Investment Trust Files For \$500 IPO

Quick Take

The Bitcoin Investment Trust (OTCQX:GBTC), sponsored by Grayscale and part of the Digital Currency Group, has initially filed to raise \$500 million in an IPO.

While GBTC says it and its custodian will take numerous security measures to safeguard its acquired Bitcoin, there is no recourse by shareholders in the event of a hack and resulting loss of Bitcoin.

Given Bitcoin currency volatility, history of online theft, limitations of shareholder recourse and unproven security measures, my opinion is to AVOID the IPO unless you are a seasoned investor willing to take on high risks.

Entity

The Bitcoin Investment Trust was created by Grayscale, a subsidiary of Barry Silbert's Digital Currency Group, for the purpose of transacting Bitcoin, or BTC, on behalf of private investors.

The trust initially launched in September 2013 as a private investment instrument and currently <u>is quoted on the OTCQX</u> under the "Alternative Reporting Standards" via the symbol GBTC.

Management of the trust is run by the sponsor, Grayscale, of which Silbert is CEO. VP Finance of Grayscale is Simcha Wurtzel, who is previously from Silbert's SecondMarket.

Per Grayscale's statement:

The investment objective of the Bitcoin Investment Trust is for the registered Shares to reflect the performance of the value of a bitcoin,

before liabilities and expenses of the Trust, as represented by the TradeBlock XBX Index.

The TradeBlock XBX Index is used to calculate the volume-weighted value of each bitcoin in U.S. dollars based on a weighting algorithm covering the preceding 24-hour period as of 4 p.m. New York time.

So, GBTC will essentially act like an ETF, allowing shareholders to trade based on the expected value of Bitcoin.

Technology

Currently, investors can buy or sell unregistered GBTC shares through personal brokerage accounts, the same way as acquiring other unregistered OTC securities.

Since its launch in 2013, the Trust has developed various security measures via the Custodian (Xapo) in the wake of several Bitcoin hacks and thefts.

These measures include what it calls 'cold storage,' where the private keys to the Trust's bitcoins are 'removed from any computers actively connected to the internet.'

However, in the Trust's S-1, there are numerous sections on the subject of security, and concomitant disclaimers of liability for breaches of same.

Notably, the filing states:

Although the Custodian uses Security Procedures with various elements such as redundancy, segregation and cold storage to minimize the risk of loss, damage and theft, neither the Custodian nor the Sponsor can guarantee the prevention of such loss, damage or theft, whether caused intentionally, accidentally or by an act of God.

Additionally, in the event of Bitcoin loss, shareholder 'recourse against the Trust, Trustee, Custodian and Sponsor under New York law governing their custody operations is limited.'

The S-1 continues: 'Further, there is also no third-party insurance to cover any loss that may be suffered with respect to the Trust's bitcoins.'

So, investors in GBTC, you're pretty much on your own, with little recourse if the Trust gets hacked or the Bitcoins are otherwise stolen.

Market and Competition

The market for Bitcoin is primarily a function of the capped quantity of 21 million total Bitcoins.

Of that amount, approximately 15.9 million BTC have been created or 'mined' to date. The current price of BTC as of January 24, 2017, is around \$905, so the current market value of all BTC is approximately \$14.39 billion.

Trusts like GBTC have not yet been approved to operate by the SEC.

The Winklevoss brothers <u>previously filed</u> to raise up to \$65 million for their ETF trust, and SolidX <u>has filed</u> to raise \$1 million for its trust.

IPO Details

GBTC intends to raise up to \$500 million in the IPO, which is composed of 'baskets' of 100 shares each.

Currently, each basket is valued at: 100×0.094 BTC = 9.4 BTC. Since each Bitcoin is currently worth around \$905, to trade a single 'basket' would require approximately \$8,507 in shareholder funds.

The Sponsor, Grayscale, manages the Trust in return for the following Combined fees:

- Marketing Fee
- Administrator Fee
- Custodian Fee
- Transfer Agent Fee
- Trustee Fee
- Extraordinary Fee

The Custodian, Transfer Agent and Trustee fees will presumably be passed through to those third-party entities.

The remaining Marketing Fee and Administrative Fee will be presumably retained by Grayscale.

The fees will be paid out of selling Bitcoin from the Trust and converted into fiat currency.

Grayscale has not disclosed how much the fees will be.

The underwriter(s) of the offering have not been listed in filings to-date.

Commentary

Bitcoin represents a new digital currency with much promise, but also plenty of risks.

The value of BTC has fluctuated dramatically in its short life, and part of the sales pitch for Bitcoin trusts is that they will enable a smoother functioning market in the trading value of the currency.

If it succeeds in raising \$500 million, GBTC will definitely be a vehicle to create liquidity in the market for BTC and to foster all sorts of trading and hedging strategies.

The various financial regulatory agencies are moving slowly in their analysis of these types of trusts.

At some point, a trust will be approved and it will go public, so it's just a matter of time.

Whether that first mover will be GBTC remains to be seen, but with this filing and its history as a quoted but unregistered security on the OTC, GBTC is certainly in the driver's seat.

Given the security questions, limitations of recourse in the event of a hack and resulting loss of Bitcoin, and the high volatility of BTC in recent years, in my opinion GBTC is not for the faint of heart or the novice investor.

Visterra Intends To Raise \$50 Million In IPO

Quick Take

Biopharma company <u>Visterra</u> (NASDAQ:<u>VIST</u>) wants to raise \$50 million in an IPO to advance its infectious and non-infectious disease treatment pipeline.

The company has multiple, significant revenue streams with potential for more revenues over the next few years, which serves to improve capital efficiency while it advances its pipeline internally and through its collaboration efforts.

Existing investors intend to purchase up to 50% of the IPO, a strongly bullish signal, so my opinion is to BUY the IPO.

Company

Cambridge, Massachusetts-based Visterra was founded in 2007 under the name of Parasol Therapeutics and changed its name to Visterra in 2010.

Brian Pereira, M.D. has been president and CEO of the company since 2013 and previously was an advisor to Alnylam Pharmaceuticals.

Jorg Thommes is Senior Vice President, Pharmaceutical Sciences and Technology since coming on board in January 2017. Mr. Thommes was previously Senior Vice President, Engineering and Technology at Biogen (NASDAQ:BIIB).

Visterra has raised in excess of \$90 million in several funding rounds from a large syndicate of investors including Merck (NYSE: MRK), The Bill & Melinda Gates Foundation, Flagship Pioneering, Polaris Partners, Lux Capital and others.

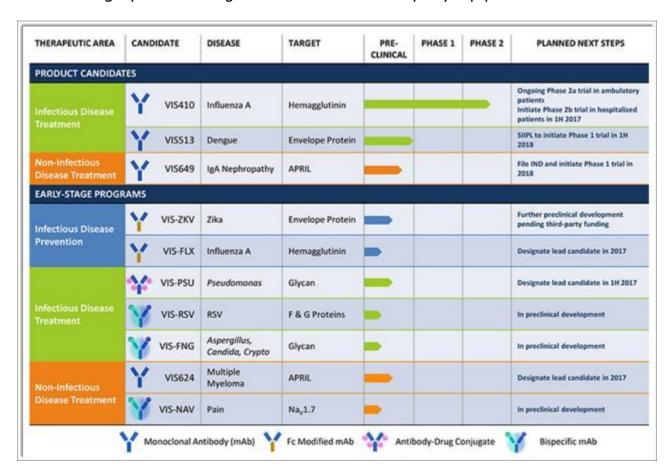
Technology

Visterra has developed what it calls a Hierotope platform to identify "unique disease targets and to design and engineer precision antibody-based biological medicines for infectious and non-infectious diseases."

The company's lead candidate is VIS410, a monoclonal antibody to treat patients with influenza A.

VIS410 is currently in Phase 2a challenge study status, and the company has been awarded a US Biomedical Advanced Research and Development Authority, BARDA, over a 40-month base period totaling \$38.6 million. Total funding could reach \$214 million.

Below is a graphic showing the status of the company's pipeline:



(Source: Visterra)

Visterra's second lead candidate is VIS513, a potential treatment for dengue fever.

In 2015 the company entered into an agreement with the Serum Institute of India Pvt. Limited, or SIIPL, where SIIPL will develop, manufacture and obtain regulatory approval for the compound in the Indian subcontinent and has made an upfront payment to Visterra for those rights.

Visterra retains the rights to commercialize the product outside the Indian subcontinent.

Market and Competition

<u>According to the CDC</u>, the number of influenza infections, A, B, and C, in the United States averages 35 million per year, with estimated influenza-associated deaths ranging from approximately 3300 to 49,000 annually.

In 2015, a Zion Research report indicated that the global influenza market was \$4.27 billion in 2014 and is expected to reach \$6.8 billion by 2020, representing a CAGR of 8.33%.

Important drivers of this growth are a World Health Organization initiative for a global action plan for influenza vaccination worldwide.

Inhibitors of market growth include the lack of cold storage facilities and the continuous evolution of the influenza virus.

Major competitors to Visterra include firms such as:

- Celltrion
- Crucell Holland (NYSE:JNJ)
- AstraZenca/MedImmune (NYSE:AZN)
- F. Hoffmann-La Roche (Genentech)
- GlaxoSmithKline (NYSE:GSK)
- Theraclone Sciences

- Anthera Pharmaceuticals (NASDAQ:ANTH)
- Merck

Financials

Visterra's recent financial results are typical for a development stage biopharma, however, the company has started receiving significant revenues from collaboration and government sources in 2015 and 2016.

These revenues totaled \$15.4 million from 2015 through September 30, 2016.

Below are the company's operational results for the past two and ¾ years (Audited GAAP for full years):

	Year Ended	December 31,	Nine Months Ended September 30,				
	2014	2015	2015	2016			
Consolidated Statement of Operations Data:	(in	thousands, excep	ands, except per share data)				
Revenue:							
Collaboration revenue	s —	\$ 1,494	s —	\$ 3,506			
Government contract revenue	-	740		9,706			
Total revenue	_	2,234	_	13,212			
Operating expenses:							
Research and development	9,881	20,410	13,427	19,167			
General and administrative	4,041	8,733	5,012	5,437			
Total operating expenses	13,922	29,143	18,439	24,604			
Loss from operations	(13,922)	(26,909)	(18,439)	(11,392)			
Other income (expense):							
Interest income	2	55	45	10			
Interest expense	(209)	(542)	(355)	(651)			
Change in fair value of warrant liability	2	(204)	(137)	17			
Total other expense, net	(205)	(691)	(447)	(624)			
Loss from operations before provision for income taxes	(14,127)	(27,600)	(18,886)	(12,016)			
Provision for income taxes		(542)	(541)				
Net loss	(14,127)	(28,142)	(19,427)	(12,016)			
Dividend of common stock to preferred stockholders	(1,080)	_					
Net loss attributable to common stockholders	\$ (15,207)	\$ (28,142)	\$(19,427)	\$(12,016)			
Net loss per share attributable to common stockholders—basic and diluted(1)	\$ (9.25)	\$ (11.91)	\$ (8.47)	\$ (4.48)			

(Source: Visterra S-1)

As of September 30, 2016, Visterra had \$14.3 million in cash and \$16.8 million in total liabilities.

IPO Details

Visterra intends to raise \$50 million by selling 3.85 million shares at a midpoint price of \$13 per share, with additional shares made available to the underwriters at their option.

Assuming a successful IPO, total common stock outstanding post-IPO would be 16.3 million shares, so the company is selling approximately 23.6% of its common stock to the public.

Certain of the company's stockholders have indicated a non-binding interest in acquiring up to approximately \$26.4 million of the IPO, which is a significant positive signal to public market investors.

Visterra is proposing to value itself at \$212 million post-IPO.

The company intends to use the IPO proceeds as follows:

to fund the portion of our planned VIS410 Phase 2b clinical trial in hospitalized patients diagnosed with influenza A that will not be funded or reimbursed by BARDA;

to fund research, preclinical development, IND-enabling studies, process development and manufacturing and to conduct our planned Phase 1a clinical trial and initiate our planned Phase 1b clinical trial for VIS649;

to fund continued research activities and preclinical development of our current early-stage programs, VIS-ZKV, VIS-FLX, VIS-PSU, VIS-RSV, VIS-FNG, VIS624 and VIS-NAV;

to fund new and ongoing research activities, including the continued expansion of our Hierotope platform;

for working capital, debt service and other general corporate purposes.

Leerink Partners is listed as the lead left underwriter of the IPO.

Commentary

Visterra believes that for infectious diseases, certain types of epitopes are highly attractive targets that 'are critical to the structural and functional integrity of the pathogen...and are common across all strains of the pathogen and resistant to mutation.'

Consequently, it has developed its Hierotope Platform to engineer antibodybased candidates that bind to these epitopes.

Visterra appears to be using its collaboration and government revenues to augment its private capital raises and develop a full pipeline of product candidates and pre-clinical targets for a wide range of infectious and non-infectious disease treatments.

The company is among a select few biopharma IPO candidates that has received significant revenues, which indicates a capital efficient approach too expensive early-stage development.

Additionally, existing institutional investors have indicated interest in acquiring almost 50% of the IPO shares.

A more typical IPO support would be in the 20% to 25% range, so this is a very bullish signal from the existing investors on the company's prospects.

While competition from a number of vectors is significant, the company also has potentially significant future revenues over the next few years from the US BARDA contract, possibly reaching an additional \$175.4 million.

This is not to say that the company won't have significant challenges ahead, as Phase 2/3 trials are where many biopharma companies have stumbled.

In the event the lead candidate is efficacious, commercialization will also be a challenge, as governments will no doubt become involved as a matter of public policy so that pricing may become a political issue, and subject to downward pressure.

Nevertheless, management appears to be skilled at developing collaborations outside its geographical focus area, such as its Indian subcontinent deal with SIIPL.

Visterra's IPO may price during the week ending January 27, 2017.

Given the company's multiple revenue streams, novel platform, future prospects from the BARDA contract, proposed post-IPO valuation of \$212 million and existing shareholder participation in the IPO, my opinion is to BUY the IPO at up to \$14 per share.

Braeburn Pharma Seeks \$150 Million In IPO Filing

Quick Take

Opioid treatment delivery system developer <u>Braeburn Pharmaceuticals</u> (Pending:<u>BBRX</u>) has updated its IPO terms and intends to sell 7.7 million shares at a midpoint price of \$19.50 per share, according to its most recent <u>S-1 filing</u>.

The company has proposed at post-IPO market cap of \$600 million, which is more than double that of other life science companies going public with no revenue history.

BBRX's differentiated technology is limited to the implantable device delivery system, not the generic drug used, so my opinion on the IPO is NEUTRAL due to its high valuation.

Company Recap

Incorporated in 2012, New Jersey-based Braeburn Pharmaceuticals is commercializing an improved delivery system for buprenorphine, a longterm treatment for opioid addiction.

The company in-licensed the system from Titan Pharmaceuticals (NASDAQ: TTNP) and has the exclusive US and Canadian rights to Probuphine, a three-device implant that provides a six-month dose of buprenorphine.

Existing treatment systems require either injections which can be inconvenient and result in less patient compliance or sublingual (under the tongue) tablets or films that addicts can still abuse.

IPO Details

Braeburn is proposing to value itself at \$600 million market cap post-IPO, based on a midpoint share price of \$19.50 and 30.6 million shares outstanding.

The company says it intends to use the net proceeds to commercialize its lead product Probuphine and to advance its product candidates in clinical development.

Sole shareholder Apple Tree Partners intends to purchase \$40 million of common stock at the IPO price in a concurrent private placement. This is a positive signal to the market from the company's sole shareholder.

Target date for the IPO is unknown at this time.

Commentary

In my original analysis of the company and its IPO prospects, *Braeburn Pharmaceuticals Looks to Raise \$150 Million_IPO*, I detailed the large market size, suboptimal existing delivery systems and the company's strategy of developing variants of its implantable device and injection system in order to expand its potential target patient population.

The U.S. is in the midst of an opioid epidemic, with an estimated 78 persons dying per day in 2014 from opioid-related causes, according to <u>a 2016 U.S</u> HHS report.

Braeburn has done an excellent job in training over 2,400 healthcare providers to prescribe an implant the device as well as over 70 payors who have indicated that they intend to cover the device.

However, the company has virtually no history of revenues, since it has only just begun to sell its lead product in the US and Canada.

Life science companies going public with no revenue history typically do not command valuations above \$300 million, so the \$600 million valuation is extremely high.

Additionally, the active ingredient in the device is generic buprenorphine, so the company's main differentiating asset to-date is the implantable device, not the drug itself.

Competitors also provide treatments via sublingual tablets and films, which while they may be subject to higher abuse by patients, still represent valid treatments in the market and will no doubt continue to receive investment to improve their efficacy and safety profile.

Accordingly, due to BBRX's \$600 million proposed valuation, which is too high given the company's lack of revenue history, competitive threats and device-only differentiation, my opinion on the IPO is neutral.